

Title (en)  
THERMAL MODULATOR

Title (de)  
THERMISCHER MODULATOR

Title (fr)  
MODULATEUR THERMIQUE

Publication  
**EP 3436811 A4 20191127 (EN)**

Application  
**EP 17776909 A 20170403**

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Abstract (en)  
[origin: WO2017173447A1] This disclosure relates a device for a chromatographic system, comprising: a chamber defining an internal portion, a capillary disposed within the chamber, the capillary having an input, an output, and an elongate body extending between the input and the output, a cold finger having a first portion in thermal contact with a portion of the elongate body to define a capillary trapping zone, wherein the first portion of the cold finger extends to a second portion that is situated external to the chamber, a heater in thermal contact with the trapping zone of the capillary and configured to transfer heat to the trapping zone, a thermal buffer configured to buffer the heat from the heater into the cold finger and thereby retain the heat within the trapping zone of the capillary, a cooling device arranged external to the chamber and thermally connected to the second portion of the cold finger to define a primary conduction zone, wherein the cooling device is configured to generate a cooling temperature zone at the primary conduction zone, a controller configured to selectively alternate the trapping zone between a cooling temperature by turning off the heat and using the cooling device together with its engagement with the cold finger, and an injection temperature using the heater, wherein the heater alternates between an off state and an on state and a user defined frequency.

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• See also references of WO 2017173447A1

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